

CLAIMS

1. A preparative separation process wherein (-)- Δ^9 -trans-tetrahydrocannabinol is separated from a mixture of cannabinoids, wherein the process comprises at least one chromatographic step wherein a mobile phase passes through a stationary phase, characterised in that the stationary phase comprises a derivatised polysaccharide and the mobile phase comprises carbon dioxide.
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2. A process according to claim 1, wherein the mobile phase is a mixture of carbon dioxide and one or more modifiers.
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3. A process according to claim 2, wherein the mobile phase is a mixture of carbon dioxide and ethanol.
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4. A process according to claim 2 or claim 3, wherein the ratio of carbon dioxide to liquid modifier is in the range 95:5 to 75:25.
5. A process according to any preceding claim, wherein the derivatised polysaccharide is immobilised on a substrate chosen from silica gel, zirconium, alumina, ceramics and other silicas.
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6. A process according to any preceding claim, wherein the stationary phase comprises an amylosic polysaccharide.
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7. A process according to claim 6, wherein the stationary phase is amylose tris(3,5-dimethylphenylcarbamate) supported on macroporous silica gel.
8. A process according to any preceding claim, wherein the process comprises a further chromatographic step wherein a mobile phase passes through a stationary phase, wherein the stationary phase is an achiral stationary phase.
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9. A process according to claim 8, wherein the achiral stationary phase is 2-ethylpyridine siloxane immobilised on a silica support.

10. A process according to claim 8 or claim 9, wherein a first chromatographic step uses the achiral stationary phase and a second chromatographic step uses the stationary phase comprising a derivatised polysaccharide.

5 11. A process according to claim 8 or claim 9, wherein a first chromatographic step uses the stationary phase comprising a derivatised polysaccharide and a second chromatographic step uses the achiral stationary phase.

10 12. A process for preparing a pharmaceutical product comprising (-)- Δ^9 -THC, wherein the process comprises a first step wherein (-)- Δ^9 -THC is separated from a mixture of cannabinoids by a process according to any preceding claim, and a further step wherein the (-)- Δ^9 -THC is combined with pharmaceutical carriers to form the pharmaceutical product.